Applicant: Bernard John Carroll Docket No.: 111590-120

U.S. Serial No.: 09/701,926 Filing Date: June 1, 2001

## IN THE CLAIMS

## Status of the Claims:

- 1. (Currently amended) An isolated phenotype modulating genetic sequence (PMGS) comprising a sequence of nucleotides which increases of stabilizes expression of a second nucleotide sequence inserted proximal to said first mentioned nucleotide sequence the nucleotide sequence depicted in SEQ ID NO:1.
- 2. (Currently amended) [[A]] <u>The PMGS</u> according to claim 1 wherein said PMGS promotes de-methylation or prevents or inhibits methylation of [[said]] <u>a</u> second nucleotide sequence <u>located within, adjacent to, or otherwise proximal to said PMGS</u>.
- 3. (Currently amended) [[A]] <u>The PMGS according to claim 1 wherein said</u>
  PMGS modulates expression of the gene encoding an amylase comprises a promoter for an amylase gene.
- 4. (Cancelled)
- 5. (Currently amended) [[A]] <u>The PMGS according to claim 3 wherein the amylase is  $\alpha$ -amylase.</u>
- 6. (Currently amended) [[A]] <u>The PMGS according to claim 1 wherein the PMGS modulates expression of a Dem (Defective embryo and meristems) gene.</u>
- 7. (Currently amended) A genetic construct comprising [[a]] the PMGS according to any one of claims 1 to 6 or 21 claim 1 and means to facilitate insertion of said second a nucleotide sequence within, adjacent to, or otherwise proximal with to said PMGS.

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8. (Currently amended) [[A]] <u>The</u> genetic construct according to claim 7 wherein the [[second]] nucleotide sequence <u>to be inserted</u> is operably linked to a promoter.

9. (Currently amended) A method of increasing or stabilizing expression of a nucleotide sequence or preventing or reducing silencing of a nucleotide sequence in a plant, promoting transcription degradation of an endogenous gene in a plant or animal or cells or a plant or animal, said methods comprising: introducing into said plant or animal or plant or animal cells said nucleotide sequence into the plant, such that when expressed in the plant, said nucleotide sequence is flanked by, adjacent to, or otherwise proximal to, [[a]] the PMGS of SEQ ID NO:1.

10.-19. (Cancelled)

20. (Currently amended) A PMGS comprising the nucleotide sequence: <400>1; <400>2; <400>3; <400>4; <400>5; <400>6; <400>7; <400>8; <400>9; <400>10; <400>11; <400>12; <400>13; <400>14; <400>15; <400>16; <400>17; <400>17; <400>20; <400>21; <400>22; <400>23; <400>23; <400>24; <400>25; <400>26; <400>26; <400>29; <400>29; <400>30 and/or <400>31; or a sequence An isolated nucleotide sequence having at least [[25%]] 80% similarity after optimal alignment of said sequence to the PMGS of SEQ ID NO:1, wherein said PMGS increases or stabilizes the expression of a second nucleotide sequence inserted proximal to said PMGS. any one of the above sequences or a sequence capable of hybridizing to any one of the above sequences under low stringency conditions at 42°C.

## 21.-22. (Cancelled)

23. (New) A sequence capable of hybridizing to the PMGS according to claim 1 or claim 20 under medium stringency conditions comprising from at least about 16% v/v to

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at least about 30% v/v formamide and from at least about 0.5M to at least about 0.9M salt for hybridization and at least about 0.5M to at least about 0.9M salt for washing.

24. (New)A sequence capable of hybridizing to the PMGS according to claim 1 or claim 20 under high stringency conditions comprising from at least about 31% v/v to at least about 50% v/v formamide and from at least about 0.01 M to at least about 0.15M salt for hybridization and at least about 0.01M to at least about 0.15M salt for washing.

25. (New) A method of increasing or stabilizing expression of a nucleotide sequence, or preventing or reducing silencing of a nucleotide sequence, in a plant or plant cell, comprising:

introducing into said plant or plant cell a construct comprising said nucleotide sequence whose expression is to be increased or stabilized, or whose silencing is to be prevented or reduced, flanked by, adjacent to, or otherwise proximal to the PMGS of SEQ ID NO:1; and

expressing said construct in said plant or plant cell.

26. (New) The method according to claim 9 or claim 25, wherein the prevention or reduction in silencing of said nucleotide sequence is by prevention of methylation, or enhancement of demethylation of said nucleotide sequence.